

GreenerDesign

September 24, 2008

Autodesk Gallery Highlights Green Aspects of Digital Design

By [Jonathan Bardelline](#)

SAN FRANCISCO, Calif. -- All of [42 Surfboards'](#) products come from sustainably harvested wood, and the company takes strides to waste as little of that material as possible.

Early in the surfboard-making process, 42 Surfboards uses software to ensure the wood is milled down to exact widths to avoid mistakes that get trashed. Even before the company starts putting together boards, it spends time designing them on computers, avoiding the time and waste from making physical prototypes.

The work of 42 Surfboards is one of 20 exhibits at the new Autodesk Gallery at One Market, in San Francisco. The gallery, created by design software company [Autodesk](#), aims to show the many journeys that design takes and encourage conversations about how designs come about. Autodesk plans to hold events and education programs at the gallery, and open it up to the public once a month.

A common theme threaded throughout the exhibits is how they've used technology to come to fruition. Although all of the designs have used some sort of Autodesk software, the company recognizes the many other programs used to make each product and projects.

"We're in this unusually leveraged position," said CEO Carl Bass. Autodesk makes software for designers, who are increasingly motivated on their own or being asked by clients to make greener and more sustainable designs, he said. "What we're trying to provide is better analysis and simulation tools," he said, to help designers add green considerations into design. Designers already have to make trade-offs between issues like aesthetics and cost, and now they must also account for sustainability concerns like materials, recyclability, energy use and lifecycle impacts. Exhibits in the 16,500 square foot space, which is seeking LEED-Commercial Interiors Platinum certification, range from the child-sized [One Laptop Per Child](#) to the towering San Francisco-Oakland Bay Bridge. The display for One Laptop Per Child shows the history of the project, tracing it from an original sketch by designer Yves Behar, through one-of-a-kind paper and plastic prototypes, all the way to working laptops that are powered by hand cranks and solar panels. "We're not just showing the finished objects," said Jason Medal-Katz, senior manager of Autodesk's Customer Briefing Program.

To show off the 96-percent-recyclable Herman Miller [Mirra chair](#), which was developed with digital sketching, modeling and visualization, Autodesk took apart and suspended the parts of the chair in front of a color-coded display that identifies which portions of the chair can and cannot be recycled.

Moving beyond products, the gallery includes a sculpture by artist Bruce Beasley, who uses 3D modeling software when making his creations. He has been using computers to design his works

since the '80s, and in 2001 he wrote about the process, "When I change my mind I throw away electrons instead of bronze."

The gallery also houses a 3D printer by [Dimension](#), along with a variety of items printed by the device. Also known as rapid prototyping, 3D printing lets designers send a file to a machine that prints it out using materials like plastic, rubber or metals, and it can make both static items and ones with moving parts. Medal-Katz said rapid prototyping makes designing much more efficient, letting developers see what they've made almost instantly compared to older labor- and waste-intensive processes.

Medal-Katz said the exhibit was helped greatly with the participation of its customers, which includes Ford, LEGO and Renzo Piano Building Workshop. "Our customers around the world are really embracing sustainable design," he said. "Soon you won't talk about sustainable design, you'll talk about good design. Because sustainable design is good design."